

west virginia department of environmental protection

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Jim Justice, Governor Austin Caperton, Cabinet Secretary www.dep.wv.gov

Evaluation Memo

Application Number:

R13-2892F

Facility ID Number:

051-00141

Name of Applicant:

Williams Ohio Valley Midstream, LLC (OVM)

Name of Facility:

Moundsville Fractionation Plant

Latitude/Longitude:

39.91290/-80.79700

Application Type:

Class I Administrative Update

Submission Date:

May 15, 2017

Applicant Ad Date:

Not Applicable

Applicant Ad Newspaper:

Not Applicable

Complete Date:

May 15, 2017

Due Date:

July 14, 2017

Engineer:

Joe Kessler

OVM's Moundsville Fractionation Plant processes up to a maximum of 42,500 barrels per day (BPD) of natural gas liquids (NGL) and therefrom produces three (3) products: propane, butane, and natural gasoline.

The facility receives raw NGL from area wells and places it in a series of twelve (12) pressure vessels (3S) ranging from 61,400 to 90,000 gallons in capacity. The primary purpose of these tanks is to act as a buffer for variations in the rate of NGL receipt to ensure a steady flow rate through the process and, additionally, to provide plant storage. As these tanks are under pressure, there is no escape of vapors from these units. The NGL is then processed through two (2) fractionation trains (1S): each train is a series of distillation processes (de-propanizer and de-butanizer towers) to generate the desired products. The distillation process first removes the propane and then the mixed butanes from the NGL. The remaining liquid is classified as "natural gasoline." The three products are accumulated in a series of nineteen (17) pressurized tanks and two (2) non-pressurized tanks ranging from 60,000 to 454,000 gallons in capacity.

The facility uses one (1) 45.54 mmBtu/hr and two (2) 89.85 mmBtu/hr natural gas-fired Hot Oil Heaters (HTR-1, HTR-2) to precisely control the temperature within certain process equipment. In addition, the facility is capable of loading out products into both trucks and rail cars (2S). Truck and rail loading of the products (and potentially un-processed NGL) is controlled by the flare.

The facility includes a flare that is used to combust NGL or products in the event of an emergency that requires rapid removal of NGL and/or product from one or more portions of the facility. The flare is also used to combust NGL and/or one or more of the products when an area of the plant must be de-pressurized for maintenance/repairs. Additionally, the flare is used to control process gases during normal operation. The flare has a permitted destruction and removal efficiency (DRE) of 99.0% (as originally determined and permitted under R13-2892C).

Description of Proposed Changes

On May 15, 2017, OVM submitted a Class I Administrative Update (A/U) to make corrections to the information in the Emission Units Table 1.0. Mostly, the corrections are related to the years various emission units were installed. Additionally, a correction was made to remove two (2) 114,000 gallon Propane Accumulation Tanks from propane service that were incorrectly listed as both in propane and butane service. No physical changes or any change in the facility's potential-to-emit (PTE) was requested as part of this permitting action.

Estimate of Emissions

OVM is not requesting any increase in emissions as a result of the proposed changes discussed above.

Regulatory Applicability

45CSR13: Permits for Construction, Modification, Relocation and Operation of Stationary Sources of Air Pollutants, Notification Requirements, Administrative Updates, Temporary Permits, General Permits, and Procedures for Evaluation

The proposed changes to the Moundsville Fractionation Plant will not increase the PTE of any regulated pollutant, or result in a physical change or a change in the method of operation at the facility. Therefore, pursuant to §45-13-4.2(a)(4), OVM is requesting a Class I Administrative Update to make "[c]orrection of typographical errors." The DAQ has previously made the determination that corrections as those proposed above are acceptable under a Class I Administrative Update based on §45-13-4.2(a)(4).

Changes to Permit R13-2892E

Substantive changes to Permit R13-2892E are limited to making corrections to the Emissions Units Table 1.0 as outlined above and as given in Permit Application R13-2892F.

Recommendation

The information provided in the permit application indicates that compliance with all applicable state and federal air quality regulations will continue to be achieved. Therefore, I recommend the issuance of the Class I Administrative Update R13-2892F to Williams Ohio Valley Midstream LLC for the changes outlined above.

Joe Kessler, PE

Engineer